

On-site Sewage Systems

Puget Sound Management Plan Goal

- Protect the Sound's water quality, shellfish growing areas and other aquatic resources from wastes generated by on-site sewage systems.

Strategies for Achieving the Goal

- Establish comprehensive programs at the local level for the appropriate application of on-site sewage treatment and disposal technologies, and for effective operation, maintenance and inspection, education and financial and technical assistance regarding on-site sewage systems.
- Provide effective state oversight, regulation and financial and technical assistance.
- Investigate, review, approve, promote and apply, as appropriate, alternative technologies for on-site sewage treatment.

Background and Trends

When on-site sewage systems are properly sited, designed, installed, operated and maintained, they effectively treat sewage in areas not served by municipal treatment plants. Improperly functioning systems pollute Puget Sound's waters with bacteria, viruses and nutrients and close productive recreational and commercial shellfish growing areas.

A number of recent initiatives are improving the performance and management of on-site sewage systems. State regulations require that local jurisdictions develop programs to ensure that on-

site systems are properly operated and maintained. The Department of Licensing—in conjunction with the Department of Health, local health jurisdictions and on-site sewage system professionals—is developing a licensing program for designers and a certification program for local health inspectors. Health contracted with local health jurisdictions to research and demonstrate alternative on-site treatment technologies and is developing an information clearinghouse on technical standards of approved systems.

Legislation in 1997 expanded the authority and flexibility of local governments to carry out and fund programs to manage on-site systems.

Field agents associated with the University of Washington and Washington State University provide an array of activities and products to educate citizens about proper operation and maintenance of on-site systems.

Local health jurisdictions are currently developing and carrying out programs to ensure that on-site sewage systems are maintained over time and do not fail. Most programs include public education, financial assistance and professional certification. Local health jurisdictions continue to struggle with difficult issues such as funding, development of databases, and enforcement.

Highlights of 2001-2003 Actions

- Health will provide technical assistance on performance, application, design and operation and maintenance of on-site systems.
- Health will review and revise technical standards and guidance documents for on-site systems and review and approve new technologies through the Technical Review Committee.
- Health will facilitate the On-Site Advisory Committee and use their recommendations to revise the state on-site sewage regulations.
- Health will continue supporting the Northwest On-Site Training Center.
- University of Washington Sea Grant and Washington State University Cooperative Extension will provide technical assistance and education to a variety of audiences on maintaining and monitoring on-site systems.
- Health, University of Washington Sea Grant and the Action Team support staff will provide technical assistance and educational materials related to on-sites.

2001-2003 Budget for State Actions

Total Provided Funding \$1,273,900

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF HEALTH							
Provide technical assistance to citizens, state and local agencies, interagency work groups and others regarding the performance, application, design, and operation and maintenance (O&M) of on-site systems. Promote the implementation of effective monitoring and O&M management programs by assisting local health jurisdictions. Develop and distribute additional guidance to health jurisdictions to assist them in establishing areas of special concern and in promoting community awareness of and support for proper operation and maintenance of on-site systems. Develop and maintain a clearinghouse of information on on-site treatment systems, using cost-effective means of distributing the information, including the department's web page.	Citizens, private sector practitioners and local health jurisdiction staff will receive the information needed to make appropriate decisions regarding on-site sewage system technologies that are appropriately matched to sites. Local programs will be enhanced and systems will be better maintained through local operation and maintenance programs, resulting in lower failure rates.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-04	OS-2	85
Promote the use of alternative (existing and new/innovative technologies) through the development of a well-trained workforce. Continue to support the Northwest On-site Training Center to help assure that training opportunities exist for all on-site sewage system practitioners. Serve on its management board, help develop and improve curriculum and products for classroom and out-of-classroom training. Extend the classes to new audiences, such as citizens and real estate professionals. Assess local health jurisdictions' needs and capacities for staff training. Develop and deliver, as needed, technology orientation and rules implementation training for local health jurisdictions.	Training opportunities will be enhanced and instructional materials will be revised to include up-to-date technical information and showcase new and innovative technologies. Private and public sector practitioners will have the opportunity to gain the knowledge and develop the skills necessary to appropriately apply the full range of on-site sewage treatment technologies to varied site and development conditions. Local health jurisdiction staff will receive information and have access to training instrumental to the implementation of local on-site sewage programs consistent with the state on-site rules.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-04	OS-5	86
Research and evaluate new and innovative on-site sewage treatment and disposal technologies. Present technical topics and issues to the Technical Review Committee (TRC) for recommendations. Develop standards and guidance documents to provide technology-specific information about the performance, application, design, and operation & maintenance (O&M). Regularly review and revise existing technical standards and guidance documents. Assist local environmental health directors develop and apply local on-site sewage program standards.	Technical standards and guidance documents will be developed for new and innovative technologies that are appropriate for the site, soils and climatic conditions in Washington. Existing technical assistance documents will be regularly revised and updated. Access to this up-to-date information will assist citizens and public and private practitioners in their decisions regarding on-site sewage treatment and disposal systems. With information about various technologies and the O&M activities and management needed to assure safe sewage treatment in their rural communities, they will be able to plan for and assure proper operation, maintenance, and monitoring of their systems. State regulations will be implemented consistently among local jurisdictions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-04	OS-5	87

STATE AGENCY ACTIONS	OUTCOMES	See page 9 for key.					
		Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID

DEPARTMENT OF HEALTH

Continue to facilitate the On-Site Advisory Committee (OSAC) to provide broad program-level direction to assure that program services are meeting priority needs, and that agency resources continue to be well directed to meet the technical assistance needs of local health jurisdictions, private-sector practitioners and citizens. Using the OSAC recommendations, revise the state on-site sewage regulations. Review and approve local on-site sewage regulations, including locally-approved waivers. Participate in local advisory committees.	The department will respond to the OSAC's suggestions for program improvements so that on-site sewage treatment and disposal continues to meet the needs of assuring public health protection in non-sewered areas while offering appropriate and cost-effective options. Standards to protect public health and the environment will be consistent statewide, while allowing local health jurisdictions the flexibility to address specific site and regional conditions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-04	OS-1	88
Review engineering reports and operation and maintenance manuals for proposed large on-site systems (LOSS). Issue permits and maintain a database. Develop agreements with local governments to implement programs for large on-site systems.	Through the LOSS program proposed projects will meet minimum standards so that public health is protected. Through an ongoing operational permit programs, these systems will receive adequate and timely operation and maintenance. Information on systems will be accessible through a database.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-04	OS-4	89

PUGET SOUND WATER QUALITY ACTION TEAM

Convene periodic meetings with the Department of Health and others to coordinate assistance to local governments on on-site issues.	Assistance to local governments will be improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	OS-1	90
With Health, convene annual workshop on developing effective local operation and maintenance programs.	Local government understanding of operation and maintenance program objectives and practices will be improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	OS-2	91
Work with Health to provide assistance to and support of local health departments in developing or enhancing programs for operation and maintenance of on-site systems.	The number of local operation and maintenance programs that are fully or partially completed will be increased.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	OS-2	92
Work with Health and others to develop additional guidance and educational materials related to management of on-site systems, especially guidance on designating areas of special concern.	Local governments will be better able to develop effective operation and maintenance programs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	OS-2	93

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LOCAL GOVERNMENT ACTIONS	OUTCOMES	Pri-ori-tv	Non-point	Sal-mon	PS Plan Element	Action ID

SOUNDWIDE

THE PUGET SOUND ACTION TEAM RECOMMENDS THAT:

<p>Local health jurisdictions shall develop operation and maintenance programs so that on-site sewage systems perform as designed and do not threaten aquatic resources and public health.</p> <p>Local on-site sewage programs shall:</p> <ul style="list-style-type: none"> * Provide for regular notification, education, inspection (including periodic system monitoring), maintenance, reporting of inspection results and follow-up by the local health jurisdiction to ensure that failing systems are repaired or replaced. * Provide for identification of areas of special concern and enhanced oversight of systems within those areas. * Establish appropriate mechanisms for funding on-site sewage programs. * Require all on-site sewage systems be designed, installed, permitted and maintained by certified or licensed professionals. 	<p>The number of failures documented by local health jurisdictions will decline. Water quality will improve.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	OS-2	96
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